

Claims

The following is a copy of Applicant's claims that identifies language being added with underlining ("___") and language being deleted with strikethrough ("—"), as is applicable:

1. (Currently amended) A heat dissipation apparatus, comprising:

a heat sink that is adapted to receive a processor mounted thereto, the heat sink comprising an internal chamber that is adapted to receive a fluid flow that removes heat from the heat sink; and

at least one external hollow prong that extends outwardly from the heat sink, the at least one external hollow prong being in fluid communication with the internal chamber of the heat sink such that fluid forced into the internal chamber flows through and out from the at least one external hollow prong.

2. (Canceled)

3. (Currently amended) The apparatus of claim ~~2~~ 1, wherein the at least one external hollow prong comprises a cylindrical tube having an internal passage, the internal passage being in fluid communication with the internal chamber of the heat sink.

4. (Currently amended) The apparatus of claim 2, wherein the heat sink comprises a top surface and wherein the at least one external hollow prong extends from the top surface of the heat sink.

5. (Currently amended) The apparatus of claim 2, further comprising a fan that is positioned such that fluid forced from the fan flows over external surfaces of the at least one external hollow prong.

6. (Original) The apparatus of claim 5, wherein the fan is part of an external flow fan module that is mounted to the heat sink.

7. (Original) The apparatus of claim 1, further comprising an inlet that is in fluid communication with the internal chamber of the heat sink such that fluid forced into the inlet flows into the internal chamber.

8. (Original) The apparatus of claim 7, further comprising a fan that is in fluid communication with the inlet.

9. (Original) The apparatus of claim 7, wherein the fan comprises part of an internal flow fan module that is mounted to the heat sink.

10. (Original) The apparatus of claim 1, wherein the heat sink comprises a bottom surface that is adapted to receive a processor.

11. (Original) The apparatus of claim 1, wherein the heat sink comprises a top plate and a bottom plate that together form the internal chamber.

12. (Currently amended) A heat dissipation apparatus, comprising:
a heat sink that is adapted to receive a processor mounted thereto, the heat sink comprising an internal chamber;
external hollow prongs that extend outwardly from the heat sink, the external hollow prongs being in fluid communication with the internal chamber of the heat sink;
and
an inlet that is in fluid communication with the internal chamber of the heat sink;
wherein fluid forced into the inlet flows into the internal chamber of the heat sink and then through the external hollow prongs to exit the heat dissipation apparatus.

13. (Currently amended) The apparatus of claim 12, wherein the heat sink comprises a top surface and a bottom surface, the external hollow prongs extending from the top surface and the bottom surface being adapted to receive a processor.

14. (Original) The apparatus of claim 13, further comprising an interior flow fan module that is in fluid communication with the inlet and mounted to the heat sink, the interior flow fan module being configured to force fluid into the inlet.

15. (Currently amended) The apparatus of claim 14, further comprising an exterior flow fan module mounted to the top surface of the heat sink, the exterior flow fan module being configured to force fluid over exterior surfaces of the external hollow prongs.

16. (Original) The apparatus of claim 15, wherein the inlet is defined by a flow director that is positioned between the interior flow fan module and the exterior flow fan module.

17. (Currently amended) A heat dissipation apparatus, comprising:
means for transmitting heat away from a processor, the means comprising at least one external hollow prong;

means for enabling flow of fluid through the means for transmitting heat away from a processor; and

means for enabling flow of fluid over the means for transmitting heat away from a processor.

18. (Original) The apparatus of claim 17, wherein the means for transmitting heat comprise a heat sink.

19. (Original) The apparatus of claim 18, wherein the means for enabling flow of fluid through the means for transmitting heat comprise an internal chamber of the heat sink and an inlet that is in fluid communication with the internal chamber.

20. (Original) The apparatus of claim 19, wherein the means for enabling flow of fluid through the means for transmitting heat further comprise an internal flow fan module that is mounted to the heat sink and in fluid communication with the inlet.

21. (Canceled)

22. (Currently amended) The apparatus of claim ~~21~~ 17, wherein the means for enabling flow of fluid through the means for transmitting heat comprise an internal passage of the at least one external hollow prong.

23. (Original) The apparatus of claim 22, wherein the means for enabling flow of fluid over the means for transmitting heat comprise an external flow fan module.

24. (Currently amended) A method for dissipating heat generated by a processor, the method comprising:

forcing fluid through an internal chamber formed within a heat sink to which the processor is mounted;

forcing the fluid from the internal chamber of the heat sink through at least one external hollow prong that extends outwardly from the heat sink and that is in fluid communication with the internal chamber of the heat sink; and

forcing fluid over exterior surfaces of the at least one external hollow prong.

25. (Original) The method of claim 24, wherein forcing fluid through an internal chamber comprises forcing air into the internal chamber using a fan module that is mounted to the heat sink.

26. (Original) The method of claim 24, wherein forcing fluid through an internal chamber comprises forcing air into the internal chamber using a fan that is separate from the heat sink.

27. (Currently amended) The method of claim 24, wherein forcing fluid over exterior surfaces of the at least one external hollow prong comprises forcing air over the at least one external prong using a fan module that is mounted to the heat sink.

28. (Currently amended) The method of claim 24, wherein forcing fluid over exterior surface of the at least one external hollow prong comprises forcing fluid over exterior surfaces of the at least one external hollow prong using a fan that is separate from the heat sink.

29. (Currently amended) A computer, comprising:

a processor; and

a heat dissipation apparatus that includes a heat sink that is adapted to receive the processor, the heat sink comprising an internal chamber that is adapted to receive a fluid flow that removes heat from the heat sink, wherein the heat dissipation apparatus further comprises at least one hollow prong that extends from the heat sink, the at least one hollow prong being in fluid communication with the internal chamber of the heat sink such that fluid forced into the internal chamber flows through the at least one hollow prong.

30. (Canceled)

31. (Currently amended) The computer of claim ~~30~~ 29, further comprising a fan that forces fluid over external surfaces of the at least one prong.

32. (Original) The computer of claim 31, wherein the fan is part of an external flow fan module that is mounted to the heat sink.

33. (Original) The computer of claim 29, wherein the heat dissipation apparatus further comprises an inlet that is in fluid communication with the internal chamber of the heat sink such that fluid forced into the inlet flows into the internal chamber.

34. (Original) The computer of claim 33, further comprising a fan that is in fluid communication with the inlet.